UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,567	08/18/2003	Stefan Knox	GFR035US	2980

7590 02/21/2007

Paul Grandinetti
Levy & Grandinetti
Suite 1108
1725 K Street, N.W.
Washington, DC 20006-1423

EXAMINER	
THOMASSON, MEAGAN J	
ART UNIT	**PAPER NUMBER**
3714	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/642,567	KNOX, STEFAN	
	Examiner	Art Unit	
	Meagan Thomasson	3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *11-21* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claim 4, the phrase "and/or" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Election/Restrictions

Applicant's election with traverse of group I (claims 1-10), in the reply filed on September 25, 2006 is acknowledged. The traversal is on the ground(s) that the generic claims 1-4 permit the examiner to conduct a single, non-burdensome search for all three claimed embodiments, groups I, II and III, drawn to a baseball glove and baseball embodiment, a boot and ball embodiment, and a bat and ball embodiment, respectively. This is not persuasive, as group III, drawn to a baseball bat embodiment, is classified in class 473 subclass 564, entitled "PLAYER HELD AND POWERED, NONMECHANICAL PROJECTOR, PER SE, FOR PROJECTING AERIAL PROJECTILE BY STRIKING; PART THEREOF OR ACCESSORY THEREFOR", wherein the nonmechanical projector of subclass 564 is a bat (e.g. baseball bat, etc.). Because the embodiments of groups I and II do not include a bat, they are not classified in 473/564 and would require a separate, and thus burdensome, search.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2,4,5 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Buhler (US 6,565,449).

Regarding claim 1, Buhler discloses a measuring device comprising pressure measuring means adapted to be fitted to a first sports implement and further adapted to record the contact pressure between the first sporting implement and a second sports implement in use, and means to communicate the pressure calculated to the user. In column 1, lines 6-10, Buhler discloses an invention relating to "an athletic impact detection and display device that may be used to estimate the impact location, force and resulting reaction exerted on a ball or similar object". The invention utilizes a piezo electric transducer sensor in order to measure impact intensity by sensing compression of piezo element and outputting a voltage (col. 3, lines 21-35). The compression is induced by a first sports element, such as a ball, striking a second sports element, such

as a bat (col. 4, lines 39-42). The contact pressure is recorded and displayed to the user (col. 3, lines 60-67, Fig. 1).

Regarding claim 2, wherein the measuring device is provided with processing means, which is provided with a database of potential contact pressure recordings, in which each potential contact pressure recording corresponds to a pre-determined value on a scale, Buhler discloses that the processor determines the result of the impact intensity by comparing the voltage output by the piezo sensor to a look-up value, and then converting the data into a corresponding speed and/or impact intensity (col. 5, lines 1-24). Utilization of a "look-up value" in order to output a corresponding speed and/or impact intensity value implies the inherent existence of a database containing the correlation data.

Regarding claim 4, wherein the predetermined value is a speed on a speed scale which substantially corresponds to the speed at which the second sports implement was traveling before it impacted the pressure measuring means, Buhler discloses that the look up value may be a speed value and, after determination, is displayed to the user (col. 5, lines 16-20).

Regarding claims 5 and 10, wherein the first sports implement is an object which is struck, and the second sports implement is a striking object, and the speed at which the second sports implement was traveling before it impacted the pressure measuring means is calculated, Buhler discloses a first sports implement is an object which is struck, e.g. a bat, and a second sports object is a striking object, i.e. a ball, and the speed measured is that at which the ball was traveling upon impacting the bat.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3,7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buhler (US 6,565,449) in view of what is well known to one of ordinary skill in the art.

Regarding claim 3, wherein the measuring device of claim 2 displays a predetermined value that ranges from 0 to 100, the measuring device of Buhler does not specifically disclose the range of possible look-up values in the database. However, it would have been obvious to one of ordinary skill in the art to present the impact intensity and/or speed information to a user on a scale ranging from 0 to 100, and further on any scale that contains values of a magnitude that would present the impact intensity information to a user in an appropriate and comprehensible manner. For

instance, a scale ranging from 0 to 1000 would not affect the inventive concept of Buhler, and thus a scale containing any appropriate values may be used as a design choice at the discretion of the inventor. Inappropriate values may be, for example, negative numbers, and the use of which would not present impact intensity or speed information to a user in a comprehensive or interpretable manner. Therefore, to present a value from 0 to 100 to the user for interpretation as an impact intensity or speed value is not new, novel, or unobvious to one of ordinary skill in the art.

Regarding claim 7, wherein the pressure measuring means is a transducer, Buhler discloses that "in the preferred embodiment a piezo electric transducer is used" as the sensing element (col. 3, lines 30-31).

Regarding claim 8, wherein the pressure measuring means is a layer of Quantum Tunneling Composite material, Buhler does not disclose the use of said Quantum Tunneling Composite material. However, this is a design choice made at the discretion of the inventor, and does not render the invention as a whole new, novel, or unobvious to one of ordinary skill in the art.

Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buhler (US 6,565,449) in view of Dilz, Jr. (US 6,079,269).

Regarding claim 6, Buhler discloses a device for measuring the impact intensity between two sports elements, as described above, wherein Buhler specifically discloses that the sports element may be any of a club, bat, ball or racket (abstract). Buhler does not disclose the limitations of claim 6, wherein the first sports implement is a baseball

glove and the second sports implement is a baseball. However, Dilz, Jr., does disclose a sensor for measuring the speed of a moving sports object, namely a baseball or softball, wherein the sensor is preferably mounted on or in a ball glove (abstract, Fig. 1).

Regarding claim 9, wherein the sensing device is adapted to be fitted to a baseball glove and comprises a base adapted to be stead in the palm of the glove at a location where a ball is conventionally caught in use, and means to hold the base in position, and in which the measuring means is disposed on the base, and in which the processing means to communicate the speed calculated are contained in a housing disposed at the rear of the glove, and in which the means to communicate the speed calculated is an LCD display, see Fig. 1 of Dilz, Jr. Dilz, Jr. does not disclose the use of a pressure sensing means to determine the speed of the incoming ball, however it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Buhler and Dilz, Jr. in order to achieve the claimed invention due to their analogous inventions. The inventions of Buhler and Dilz, Jr. are analogous in that they both determine the speed of an incoming sports element upon contact with a second sports element.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent prior art includes Gednet et al. (US 5,209,483), Hossack (US 2003/0017882 A1), and Dilz, Jr. (US 5,864,061). All pertain to speed measuring sports devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meagan Thomasson whose telephone number is (571) 272-2080. The examiner can normally be reached on M-F 830-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Olszewski can be reached on (571) 272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Meagan Thomasson
February 13, 2007

2/14/07

ROBERT OLSZEWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700